

System Name: Shallow Lake Water System
Municipality: Township of Georgian Bluffs
Drinking Water System Category: Large Municipal Residential

The Township of Georgian Bluffs borders the City of Owen Sound to the south, west and north. The Township is located in the northwest part of the County of Grey, entirely in the Grey Sauble Source Protection Area. The Georgian Bay shoreline surrounds the Township to the east and north. The Township has a mix of urban, rural and agricultural land including commercial/industrial development and several defined settlement areas, as well as many recreation areas. In 2011, the population was 10,404, a decrease of 1.0% from 2006. The main towns are Shallow Lake (population 447) and Kilsyth (population 100). Smaller settlement areas include Keady, Rockford, Springmount, Jackson, Balmy Beach, and Clavering.

The Township of Georgian Bluffs is currently operating a total of three separate municipal water supply systems, of which two are groundwater and one is surface water. The current groundwater systems include the Pottawatomi Drinking Water System and the Shallow Lake Drinking Water System, both of which are designated as GUDI*. The surface water system is the East Linton system. No new drinking water systems are planned. A fourth surface water system, Presqu'ille has recently been decommissioned but is included in this report because it appears in the approved Terms of Reference document.

The Shallow Lake Drinking Water System is located in the former Village of Shallow Lake in the Township of Georgian Bluffs and is comprised of two bedrock wells: Well No. 2, constructed in 1996, and Well No. 3, constructed in 1999. Both wells are located northwest of Shallow Lake, two kilometres east of Bruce Road 10 and 500 metres south of Hwy 6. Well No. 1, a reserve well, was disconnected from the system in 1999. Well No. 2 is 46.9m deep and is cased to a depth of 21.3m. Well No. 3 is 61m deep and is cased to a depth of 15.2m.

According to the engineer's report (Gamsby and Mannerow, 2001), Shallow Lake Wells No. 2 and 3 draw water from a fractured bedrock aquifer in an area of karst topography. Due to the relatively meagre thickness of this layer and the presence of water-filled depressions in the WHPA**, windows through the confining layer are expected to exist. Bedrock at these well locations is limestone of the Guelph and Amabel formations as well as Fossil Hill limestone. At the bottom of the drilled holes, the Shallow Lake wells encounter shale from the Cabot Head formation.

The raw water quality is generally poor, both bacteriologically and chemically, and has been confirmed GUDI due to the presence of high turbidity, total coliforms and dissolved oxygen concentration in the raw water supply (Gamsby and Mannerow, 2001).



Shallow Lake water treatment building



Shallow Lake wells

